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PATENT & TRADEMARK OFFICE

SEQUENCE LISTING

<110> HAZEN, KEVIN C.
SINGLETON, DAVID R.
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WU, JEAN G.
GLEE, PATTI M.

<120> YEAST CELL WALL PEPTIDES AND ANTIBODIES THERETO

<130> 032905-010

<140> 09/913,850
<141> 2001-12-14

<150> PCT/US00/04228
<151> 2000-02-18

<150> 60/120,765
<151> 1999-02-19

<150> 60/120,764
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<160> 41

<170> PatentIn Ver. 3.3

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<223> glutamate or glutamine

<220>
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<223> variable amino acid or not present

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<222> (3)
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<400> 1
Xaa Xaa Xaa Xaa Xaa Xaa
1 5

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<211> 12
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<220>
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<400> 3
Ser Asp Arg Leu Glu Val Gly Thr Glu Asp Leu Arg
1 5 10

<210> 4
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Asp Val Glu Val Gly Ala Glu Asp Ala Leu Phe Ser
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<400> 5
Ile Glu Ala Arg Val Glu Ile Asp Trp Ser Leu Asp
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<210> 6
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Gly Arg Asn Leu Glu Val Asp Arg Ala Leu Asp Thr
1 5 10

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<400> 7
Arg Ser Met Leu Glu Leu Asp Val Ile Leu Glu Gly
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<400> 8
Glu Gly Ile Gly Val Glu Val Glu Val Val Leu Glu
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<210> 9
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Arg Val Glu Leu Ala His Glu Leu Glu Gly Val Trp
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Glu Leu Asp Ala Ile Asp Arg Pro Gly Ile Val Val
1 5 10

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Val Arg Leu Glu Ile Asp Gln Ile Asp Arg Gly Pro
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<400> 13
Ser Phe Glu Val Asp Pro Ile Asp Glu Asn Ser Gly
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<400> 15
Ile Gly Phe Val Glu Arg Asp Asp Ile Asp Ala Glu
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Pro Leu Leu Pro Glu Pro Leu Phe Ile Glu Leu Gly
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<400> 18
Glu Lys Leu Tyr Ile Ser Ala Trp Asp His Leu Asn
1 5 10

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<210> 22
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<223> Ile or Leu

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<210> 24
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Ile Trp Ile Pro Arg
1 5

<210> 25
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<220>
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<400> 25
Cys Leu Asp Val Arg
1 5

<210> 26
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<400> 26
Trp Ala Tyr Asp Ala Gly Ser Lys
1 5

<210> 27
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<400> 27
Tyr Gln Pro Gln Tyr Gly Arg
1 5

<210> 28
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<400> 28
Ala Leu Asn Pro Ser His Gly Ile Asp Val Gly Lys
1 5 10

<210> 29
<211> 14
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<223> Description of Artificial Sequence: Synthetic peptide

<400> 29
Leu Val Gln Pro Ala Val Gln Asn Asp Ser Asp Pro Asn Arg
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<210> 30
<211> 16
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<220>
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Ala Asn Ser Ala Leu Asp Gly Gln Gly Asn Leu Val Ile Thr Ala Arg
1 5 10 15

<210> 31
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<220>
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<400> 31
Asp Leu Gln Ala Pro Asn Asp His Val Val Gly Pro Ile Ala Arg
1 5 10 15

<210> 32
<211> 16
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<220>
<223> Description of Artificial Sequence: Synthetic peptide

<400> 32
Gly Ala Ala Val Gln Val Trp Thr Cys Asn Gly Thr Gly Ala Gln Lys
1 5 10 15

<210> 33
<211> 22
<212> PRT
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<220>
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<400> 33
Thr Thr Ala Leu Thr Asn Pro Asn Gln Pro Asp Ala Asn Ser Ala Gly
1 5 10 15

Phe Tyr Gln Asp Ala Arg
20

<210> 34
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<220>
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<400> 34
Glu Pro Leu Tyr Ile
1 5

<210> 35
<211> 5
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<220>
<223> Description of Artificial Sequence: Synthetic peptide

<400> 35
Glu Pro Leu Tyr Val
1 5

<210> 36
<211> 5
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<220>
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Glu Pro Leu Phe Ile
1 5

<210> 37
<211> 5
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<220>
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Glu Pro Leu Phe Val
1 5

<210> 38
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<220>
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<222> (2)
<223> Glu, Pro, or Lys

<220>
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<222> (4)
<223> Phe or Tyr

<220>
<221> MOD_RES
<222> (5)
<223> Ile or Val

<220>
<221> MOD_RES
<222> (6)
<223> Ser or Thr

<400> 38
Glu Xaa Leu Xaa Xaa Xaa
1 5

<210> 39
<211> 1301
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic DNA sequence coding 6C5 antigen

<220>
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<222> (151)..(1182)

<400> 39

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aatctctcat caattgaagg atagttccaa atttcatcat taaaaacaac tacaaataac 120

tacaacttaa ctttaactaa aaaaaaaaac atg tca atc gat aaa tca aga atg  174
                                Met Ser Ile Asp Lys Ser Arg Met
                                  1               5

gtc acc aga tta ggt aaa tct ggt ttg aag gtc aac act gtt gct gtc   222
Val Thr Arg Leu Gly Lys Ser Gly Leu Lys Val Asn Thr Val Ala Val
     10                  15                  20

ggt act atg aga ttg gga tcc agt tgg aga ggt ttt aat ggt gac atc   270
Gly Thr Met Arg Leu Gly Ser Ser Trp Arg Gly Phe Asn Gly Asp Ile
 25                  30                  35                  40

gac gag tgt ttg aaa att ttg aaa ttt tgt tat gac aac ggg ttc cgt   318
Asp Glu Cys Leu Lys Ile Leu Lys Phe Cys Tyr Asp Asn Gly Phe Arg
                 45                  50                  55

act ttc gat act gct gat act tac tca aat ggt aaa tct gaa gag ttg   366
Thr Phe Asp Thr Ala Asp Thr Tyr Ser Asn Gly Lys Ser Glu Glu Leu
             60                  65                  70

ttg ggt tta ttc atc aag aaa tac aat att cca cgt gaa cga att gtc   414
Leu Gly Leu Phe Ile Lys Lys Tyr Asn Ile Pro Arg Glu Arg Ile Val
         75                  80                  85

att tta acc aaa tgc tac ttc tca gtc aaa gac gac gca gaa gac agt   462
Ile Leu Thr Lys Cys Tyr Phe Ser Val Lys Asp Asp Ala Glu Asp Ser
     90                  95                 100

tca ctt gaa att gat cca att gac tat atg aac ggt aaa gga ttg agc   510
Ser Leu Glu Ile Asp Pro Ile Asp Tyr Met Asn Gly Lys Gly Leu Ser
105                 110                 115                 120

aga aag cat atc tta gcc gca gct gaa gct tcc gtt aaa cgt ttg gga   558
Arg Lys His Ile Leu Ala Ala Ala Glu Ala Ser Val Lys Arg Leu Gly
                125                 130                 135

aca tat att gat gtg ttg caa att cat cgt tta gac cat gaa gtc aca   606
Thr Tyr Ile Asp Val Leu Gln Ile His Arg Leu Asp His Glu Val Thr
            140                 145                 150

tat gaa gag gtt atg cgt tct tta aat gat gtt gtt gaa caa gga ttg   654
Tyr Glu Glu Val Met Arg Ser Leu Asn Asp Val Val Glu Gln Gly Leu
        155                 160                 165

gca aga tac att ggt gcc tca tct atg aaa aca tgg gaa ttt gtt gag   702
Ala Arg Tyr Ile Gly Ala Ser Ser Met Lys Thr Trp Glu Phe Val Glu
    170                 175                 180

ttg caa aat gtt gct aaa gca aat ggt tgg cac caa ttc atc tcc atg   750
Leu Gln Asn Val Ala Lys Ala Asn Gly Trp His Gln Phe Ile Ser Met
185                 190                 195                 200
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caa agt cac tat tct tta ttg tac cgt gag gac gag aga gaa ttg aat   798
Gln Ser His Tyr Ser Leu Leu Tyr Arg Glu Asp Glu Arg Glu Leu Asn
                205                 210                 215

gac tat tgt aag aag aat ggt att gga tta atc cct tgg tct cca aac   846
Asp Tyr Cys Lys Lys Asn Gly Ile Gly Leu Ile Pro Trp Ser Pro Asn
            220                 225                 230

ggt ggt ggt gtt ttg tgt cgt cca ttc gac tct gaa aaa act aag cag   894
Gly Gly Gly Val Leu Cys Arg Pro Phe Asp Ser Glu Lys Thr Lys Gln
        235                 240                 245

ttc tta gac aac aag caa tgg tca agt tta ttt gga tta gaa aat gtc   942
Phe Leu Asp Asn Lys Gln Trp Ser Ser Leu Phe Gly Leu Glu Asn Val
    250                 255                 260

aga gac gca gat aag att atc gtc gat aga gtt gaa gag ttg agt gtt   990
Arg Asp Ala Asp Lys Ile Ile Val Asp Arg Val Glu Glu Leu Ser Val
265                 270                 275                 280

aaa tac aat gca tct atg atg caa gtt tca ttg gca tgg tgt att gct  1038
Lys Tyr Asn Ala Ser Met Met Gln Val Ser Leu Ala Trp Cys Ile Ala
                285                 290                 295

aaa ggt gtg att cca att gcc ggt gtc tcc aaa ttt gag caa gct gaa  1086
Lys Gly Val Ile Pro Ile Ala Gly Val Ser Lys Phe Glu Gln Ala Glu
            300                 305                 310

gaa ttg gtt ggt att ttc aaa gtc aac tta act gaa gat gat atc aaa  1134
Glu Leu Val Gly Ile Phe Lys Val Asn Leu Thr Glu Asp Asp Ile Lys
        315                 320                 325

tat ctt gaa gag cca tat cac gcc aaa gac ttg gca aga gtt gct gct  1182
Tyr Leu Glu Glu Pro Tyr His Ala Lys Asp Leu Ala Arg Val Ala Ala
    330                 335                 340

taagtttgtt atgtagttta gctttgctaa tcgtttatct ttattaggtc tagatatgaa 1242

ttacaaaata catgtgtatc ttgccatttt atatacaaat aagatttatc ttggcttaa  1301
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<220>
<223> Description of Artificial Sequence: Synthetic
amino acid sequence of 6C5 antigen

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Leu Lys Val Asn Thr Val Ala Val Gly Thr Met Arg Leu Gly Ser Ser
             20                  25                  30
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Trp Arg Gly Phe Asn Gly Asp Ile Asp Glu Cys Leu Lys Ile Leu Lys
         35                  40                  45

Phe Cys Tyr Asp Asn Gly Phe Arg Thr Phe Asp Thr Ala Asp Thr Tyr
     50                  55                  60

Ser Asn Gly Lys Ser Glu Glu Leu Leu Gly Leu Phe Ile Lys Lys Tyr
 65                  70                  75                  80

Asn Ile Pro Arg Glu Arg Ile Val Ile Leu Thr Lys Cys Tyr Phe Ser
                 85                  90                  95

Val Lys Asp Asp Ala Glu Asp Ser Ser Leu Glu Ile Asp Pro Ile Asp
            100                 105                 110

Tyr Met Asn Gly Lys Gly Leu Ser Arg Lys His Ile Leu Ala Ala Ala
        115                 120                 125

Glu Ala Ser Val Lys Arg Leu Gly Thr Tyr Ile Asp Val Leu Gln Ile
    130                 135                 140

His Arg Leu Asp His Glu Val Thr Tyr Glu Glu Val Met Arg Ser Leu
145                 150                 155                 160

Asn Asp Val Val Glu Gln Gly Leu Ala Arg Tyr Ile Gly Ala Ser Ser
                165                 170                 175

Met Lys Thr Trp Glu Phe Val Glu Leu Gln Asn Val Ala Lys Ala Asn
            180                 185                 190

Gly Trp His Gln Phe Ile Ser Met Gln Ser His Tyr Ser Leu Leu Tyr
        195                 200                 205

Arg Glu Asp Glu Arg Glu Leu Asn Asp Tyr Cys Lys Lys Asn Gly Ile
    210                 215                 220

Gly Leu Ile Pro Trp Ser Pro Asn Gly Gly Gly Val Leu Cys Arg Pro
225                 230                 235                 240

Phe Asp Ser Glu Lys Thr Lys Gln Phe Leu Asp Asn Lys Gln Trp Ser
                245                 250                 255

Ser Leu Phe Gly Leu Glu Asn Val Arg Asp Ala Asp Lys Ile Ile Val
            260                 265                 270

Asp Arg Val Glu Glu Leu Ser Val Lys Tyr Asn Ala Ser Met Met Gln
        275                 280                 285

Val Ser Leu Ala Trp Cys Ile Ala Lys Gly Val Ile Pro Ile Ala Gly
    290                 295                 300

Val Ser Lys Phe Glu Gln Ala Glu Glu Leu Val Gly Ile Phe Lys Val
305                 310                 315                 320

Asn Leu Thr Glu Asp Asp Ile Lys Tyr Leu Glu Glu Pro Tyr His Ala
                325                 330                 335
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Lys Asp Leu Ala Arg Val Ala Ala
340

<210> 41
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic peptide

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Glu Ile Asp Pro Ile Asp
1 5